

**METHOD OF ENHANCING CLEAR FIELD PHASE SHIFT MASKS  
WITH BORDER REGIONS AROUND PHASE 0 AND PHASE 180  
REGIONS**

**ABSTRACT OF THE DISCLOSURE**

A technique in which a first boundary region is added to the ends of phase zero (0) pattern defining polygons and a second boundary region is added to the ends of phase 180 pattern. This technique can improve line end pattern definition and improve the manufacturability and patterning process window. The added boundary region balances the light on both sides of the line ends, resulting in a more predictable final resist pattern.